



Clean Version Of The Pending Claims Under 37 C.F.R. 1.121(c)(3):

Claims 1-10 and 12-44, now pending, are submitted below in accordance with 37 C.F.R. §1.121(c)(3), which presents a clean version of the entire set of pending claims.

1. A television tuner comprising:

a country table listing a plurality of countries;

multiple channel-to-frequency mapping tables correlating channel numbers to corresponding frequencies for associated countries in the country table, the channel-to-frequency mapping tables being indexed by the country table so that selection of a country in the country table references an associated channel-to-frequency mapping table for the selected country; and

a tuning device to tune to a particular frequency within the channel-to-frequency mapping table associated with the selected country upon selection of a corresponding channel.

2. A television tuner as recited in claim 1, wherein the country table lists the countries according to a uniquely assigned country code.

3. A television tuner as recited in claim 1, wherein the country table lists the countries according to an International Telecommunications Union (ITU) code.

1 4. A television tuner as recited in claim 1, wherein the channel-to-
2 frequency mapping tables also contain a television standard for the associated
3 countries.

4
5 5. A television tuning component for a television tuning system,
6 comprising:

7 a country table listing a plurality of countries; and

8 multiple channel-to-frequency mapping tables correlating channel numbers
9 to corresponding frequencies for associated countries in the country table, the
10 channel-to-frequency mapping tables being indexed by the country table so that
11 selection of a country in the country table references an associated channel-to-
12 frequency mapping table for the selected country and selection of a channel in the
13 channel-to-frequency mapping table maps to a corresponding frequency.

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15 6. A television tuning component as recited in claim 5, wherein the
16 country table lists the countries according to a uniquely assigned country code.

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18 7. A television tuning component as recited in claim 5, wherein the
19 country table lists the countries according to an International Telecommunications
20 Union (ITU) code.

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22 8. A television tuning component as recited in claim 5, wherein the
23 channel-to-frequency mapping tables also contain a television standard for the
24 associated countries.
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1 9. A television tuning component as recited in claim 5, embodied in
2 software as a dynamic linked library stored on a computer-readable storage
3 medium.

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5 10. A television tuner incorporating the television tuning component as
6 recited in claim 5.

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8 11. ~~Cancelled~~

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10 12. (Amended) A tuner, comprising:
11 tuner circuitry to tune to various television frequencies carrying television
12 video signals;

13 a tuner module coupled to adjust the tuner circuitry to scan multiple
14 channels within a particular locale for corresponding tuning frequencies, the tuner
15 module storing the tuning frequencies for the particular locale;

16 upon transporting the tuner to a new locale, the tuner module scans multiple
17 channels within the new local for corresponding tuning frequencies; and

18 upon transporting the tuner back to the particular locale, the tuner retrieves
19 the stored tuning frequencies to restore operation in the particular locale.

20
21 13. A television tuning system comprising:
22 tuner circuitry to tune to various television frequencies carrying television
23 video signals;

24 video decoder circuitry coupled to receive a television video signal from the
25 tuner circuitry and to convert the television video signal to digital video data;

1 a tuner module coupled to adjust the tuner circuitry to a particular television
2 frequency;

3 a video decoder module to decode the digital video data according to a
4 particular video standard;

5 wherein the tuner module has a country table listing a plurality of countries
6 and multiple channel-to-frequency mapping tables that provide video standards
7 and correlate channel numbers to corresponding frequencies for associated
8 countries in the country table, the channel-to-frequency mapping tables being
9 indexed by the country table so that selection of a country in the country table
10 references an associated channel-to-frequency mapping table for the selected
11 country; and

12 wherein the tuner module selects a channel-to-frequency mapping table
13 based upon input of a particular country and outputs a video standard to the video
14 decoder for use in decoding the digital video data, the tuner module further
15 selecting a television frequency from the selected channel-to-frequency mapping
16 table based upon input of a corresponding channel and outputting the selected
17 television frequency to the tuner circuitry to cause the tuner circuitry to tune to the
18 selected television frequency.

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20 14. A television tuning system as recited in claim 13, wherein the
21 country table lists the countries according to an International Telecommunications
22 Union (ITU) code.
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1 15. A television tuning system as recited in claim 13, wherein the tuner
2 module is embodied as a dynamic linked library.

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4 16. A television tuning system as recited in claim 13, further comprising
5 a second tuner module different from the tuner module, the second tuner module
6 being used to replace the tuner module during upgrade without replacing the
7 tuning circuitry and the decoding circuitry.

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9 17. A television tuning system as recited in claim 13, wherein the tuner
10 module supports an application program interface to expose functionality of the
11 tuner module to an application program.

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13 18. A television tuning system as recited in claim 13, wherein the tuner
14 module stores a set of television frequencies that map to corresponding channels
15 within the particular country for subsequent retrieval.

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17 19. A television tuning manager for a television tuner, the television
18 tuning manager being implemented in software stored on a computer-readable
19 storage medium, the television tuning device comprising:

20 a country table listing a plurality of countries;

21 multiple channel-to-frequency mapping tables correlating channel numbers
22 to corresponding frequencies for associated countries in the country table, the
23 channel-to-frequency mapping tables being indexed by the country table so that
24 selection of a country in the country table references an associated channel-to-
25 frequency mapping table for the selected country;

1 a code segment to select a channel-to-frequency mapping table based upon
2 input of a particular country; and

3 a code segment to output a broadcast frequency from the selected channel-
4 to-frequency mapping table based upon input of a corresponding channel.

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6 20. A television tuning manager as recited in claim 19, wherein the
7 country table lists the countries according to a uniquely assigned country code.

8
9 21. A television tuning manager as recited in claim 19, wherein the
10 country table lists the countries according to an International Telecommunications
11 Union (ITU) code.

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13 22. A television tuning manager as recited in claim 19, wherein the
14 channel-to-frequency mapping tables also contain a television standard for the
15 associated countries.

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17 23. A television tuning manager as recited in claim 19, further
18 comprising a code segment to store a set of broadcast frequencies that map to
19 corresponding channels within the particular country for subsequent retrieval.

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21 24. A television tuning manager as recited in claim 19, embodied as a
22 software dynamic linked library stored on a computer-readable storage medium.

1 25. A television tuning manager as recited in claim 19, embodied as a
2 computer software module that is dynamically accessible by an application
3 program, the television tuning manager further comprising an application program
4 interface to expose functionality of the television tuning manager to the
5 application program.

6
7 26. An application program interface for a television tuning system, the
8 application program interface being embodied on a computer-readable medium
9 and having methods for performing the following functions:

10 setting a current TV channel;

11 retrieving the current TV channel;

12 setting a country code;

13 retrieving the country code;

14 setting a storage index for regional channel to frequency mappings; and

15 retrieving the storage index.

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17 27. An application program interface for a television tuning system, the
18 application program interface being embodied on a computer-readable
19 medium and having methods for performing the following functions:

20 retrieving all analog video TV standards supported by the tuning system;

21 retrieving a current analog video TV standard in use;

22 setting a current TV channel;

23 retrieving the current TV channel;

24 retrieving highest and lowest channels available;

25 scanning for a precise signal on the current TV channel's frequency;

1 setting a country code;
2 retrieving the country code;
3 setting a storage index for regional channel to frequency mappings;
4 retrieving the storage index;
5 retrieving a number of TV sources plugged into the tuning system;
6 setting a type of tuning system;
7 retrieving the type of tuning system;
8 retrieving a current video frequency; and
9 retrieving a current audio frequency.

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11 28. A method comprising the following steps:

12 receiving an ITU (International Telecommunications Union) code for a
13 particular country; and
14 selecting, based on the ITU code, a set of TV channel-to-TV frequency
15 mappings for use in the particular country.

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17 29. A method as recited in claim 28, further comprising the step of
18 selecting, based on the ITU code, a TV standard for use in the particular country.

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20 30. A method as recited in claim 28, further comprising the step of
21 storing the selected set of TV channel-to-TV frequency mappings.

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23 31. A computer-readable medium having computer-executable
24 instructions for performing the steps in the method as recited in claim 28.
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1 32. (Amended) A method comprising the following steps:
2 receiving a reference to a country;
3 selecting, based on the country reference, a set of channel-to-frequency
4 mappings correlating channels to corresponding TV frequencies in the country;
5 receiving a channel; and
6 selecting, based on the channel, a TV frequency that maps to the channel.

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8 33. A method as recited in claim 32, further comprising the step of
9 tuning to the TV frequency.

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11 34. A method as recited in claim 32, wherein the country reference is an
12 ITU (International Telecommunications Union) code.

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14 35. A method as recited in claim 32, further comprising the step of
15 selecting, based on the country reference, a TV standard for the country.

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17 36. A method as recited in claim 32, further comprising the step of
18 scanning for a better quality frequency within the channel.

19
20 37. A method as recited in claim 32, wherein the step of selecting a set
21 of channel-to-frequency mappings comprises the following steps:

22 looking up the country in a country table that lists multiple countries; and
23 indexing from an entry for the country in the country table to a particular
24 channel-to-frequency table, the particular channel-to-frequency table containing
25 mappings of channel numbers to TV frequencies for the country.

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2 38. A method as recited in claim 37, wherein the step of selecting a TV
3 frequency comprises the step of looking up in the particular channel-to-frequency
4 table a TV frequency that corresponds to the channel.

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6 39. A computer-readable medium having computer-executable
7 instructions for performing the steps in the method as recited in claim 32.

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9 40. A method comprising the following steps:
10 configuring a tuning system for operation in a first locale by determining
11 tuning frequencies for an associated set of channels;
12 storing the tuning frequencies for the first locale;
13 upon transporting the tuning system to a second locale, reconfiguring the
14 tuning system for operation in the second locale; and
15 upon transporting the tuning system back to the first locale, retrieving the
16 stored tuning frequencies to restore operation in the first locale.

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18 41. A method as recited in claim 40, wherein the configuring step
19 comprises the step of scanning for optimal tuning frequencies for the associated
20 set of channels.

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22 42. A computer-readable medium having computer-executable
23 instructions for performing the steps in the method as recited in claim 40.

24
25 43. A tuning system comprising:

1 a country table listing a plurality of countries; and,
2 multiple channel-to-frequency mapping tables correlating channel numbers
3 to corresponding frequencies for associated countries in the country table, the
4 channel-to-frequency mapping tables being indexed by the country table so that
5 selection of a country in the country table references an associated channel-to-
6 frequency mapping table for the selected country, and wherein said tuning system
7 adjusts to a particular video standard based on a selected channel from one of the
8 multiple channel-to-frequency mapping tables.

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10 44. One or more computer-readable media having computer readable
11 instructions thereon which, when executed by a computer, cause the computer to:
12 receive data regarding a selected country;
13 map to channels available for the selected country;
14 receive data regarding a selected channel;
15 map to an appropriate video standard based on at least one of the selected
16 country and selected channel; and,
17 format a tuning component to the appropriate video standard.

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